

A Different Path to Homeownership: The Case of Taiwanese Immigrants in Los Angeles

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ABSTRACT

Taiwanese immigrants in Los Angeles stand in contrast to the well-documented homeownership deficit among immigrants. Despite the tremendous growth in Taiwanese immigrants during the 1980s, Taiwanese homeownership rate not only was among the highest of all ethnic groups in 1990, but also recorded a phenomenal increase of 16 percentage points between 1980 and 1990. This article examines this trend and assesses the contributing factors. It reveals that (1) education and wealth were contributors to Taiwanese high homeownership; (2) Chinese immigrants in general and Taiwanese immigrants in particular had endowment-adjusted homeownership rates well above that of non-Hispanic whites, while the ways in which ethnic Chinese immigrants achieve high homeownership were reflective of their distinctive paths of immigration; (3) surprisingly, higher English proficiency, an indicator of acculturation, was negatively associated with Taiwanese homeownership; (4) the large rise in Taiwanese homeownership in the 1980s was largely contributed by young, highly educated, newly arrived Taiwanese with a low level of income and a high level of wealth. Findings refute the hypothesis that immigrants are always plagued by homeownership deficits. Well-off immigrants, such as the Taiwanese, may have followed a path of assimilation not yet documented in the literature; acculturation and social adaptation may no longer be preconditions for their economic integration. The arrival of well-off immigrants has a significant potential to bolster regional demand for owner-occupied housing.

KEY WORDS: Taiwanese immigrants, homeownership, Los Angeles, adaptation

Introduction

Homeownership, almost synonymous with the “American Dream,” is a primary indicator of socioeconomic well-being in America (Rossi & Weber, 1996; Rohe, Van Zandt & McCarthy, 2002). Homeownership has a special meaning to immigrants, as it represents an important milestone in their adaptation to the host society (Alba & Logan, 1992; Borjas, 2002). However, immigrants and minorities in general still have lower homeownership rates than non-Hispanic whites¹, even after accounting for their socioeconomic status (Bianchi, Farley & Spain, 1982; Wachter & Megbolugbe, 1992). It has been a top priority of the federal housing policy to promote homeownership, especially among minority and immigrant households.

An equally fascinating phenomenon is the rapid increase in immigration over the past two decades.² As a result, Asian and Pacific American populations doubled their number in the 1980s and increased by another 36 percent in the 1990s. More specifically, the Chinese population has well exceeded two million, surpassing Filipino and becoming the largest Asian group in the United States (U.S. Census Bureau, 2001). The precipitous increase in immigration, coupled with homeownership disparities among immigrants, may counteract the national strategy of promoting homeownership.

¹ Throughout this paper, whites refer to non-Hispanic whites, Asian to non-Hispanic Asian, and blacks to non-Hispanic blacks.

² In this paper, “immigrant” and “foreign-born” are used interchangeably, although the foreign-born population may include temporary foreign visitors, such as international students and temporary workers, in addition to immigrants.

While the homeownership disparities are worrisome, the good news is that many recent immigrants have taken a special path to homeownership. Chinese immigrants in general and Taiwanese immigrants in particular stand in contrast to the gloomy picture of immigrants' homeownership deficit (Painter, Yang & Yu, 2003). In the Los Angeles metropolitan area, for instance, Taiwanese immigrants had a homeownership rate of 75 percent in 1990, more than 15 percentage points higher than that of white households, reflecting a 16 percentage point jump over the Taiwanese rate in 1980. It is less clear, however, what factors led to Taiwanese high homeownership and to the rapid rise in their homeownership rates during the 1980s.

The 1980s is a particularly interesting time for this study. The decade witnessed major policy shifts in both Taiwan and the United States, which respectively relaxed exit requirements and allowed a larger quota of Taiwanese immigration to the United States. Taiwan in the 1980s not only saw unprecedented growth in income and asset inflation, but also suffered from increasing environmental pollution and social stress. In addition to the byproducts of the economic prosperity, the political tensions across the Taiwan Strait set the stage for a large emigration from Taiwan in the 1980s (Beal & Sos, 1999). An additional rationale is that the 1980s experienced a shift in the composition of Taiwanese immigrants, from more human-capital oriented to more business oriented (Tseng, 1995). Moreover, Los Angeles has become the favored destination of middle- and upper-middle-class Taiwanese immigrants who may have sold houses in their native countries and brought wealth with them to the new land (Waldinger & Tseng,

1992). Furthermore, available data samples for 1980 and 1990 allow snapshots of Taiwanese homeownership attainment before and after these important events.

This article's main objective is to examine Taiwanese immigrants' tenure choice in the Los Angeles region, illustrating a unique path by which Taiwanese immigrants achieve high homeownership in the 1980s. More specifically, it investigates the extent to which Taiwanese immigrants are different from white and other ethnic Chinese households in tenure choice. This is followed by an analysis of the role of English proficiency and the duration of U.S. residence in enabling households to own a home. Then a decomposition procedure is used to quantify the *trends* in homeownership attainment among household samples stratified by age, education, immigrant status, income, and wealth. This setting allows the examination of whether, for example, the arrival of highly educated Taiwanese immigrants has similar impacts on the overall increase in homeownership propensity, as do immigrants with less education.

Theories and Recent Studies

Immigration and Adaptation

A large body of research on immigration concerns what happens once immigrants arrive at their destinations and how they adapt to the host society. One aspect of traditional assimilation theory posits that immigrants arrive in the U.S. with low socioeconomic status, gradually improve themselves over time, and eventually become indistinguishable from the U.S.-born population (Gordon, 1964).

When assimilation is at work, the duration of stay in the U.S. is positively associated with adaptation (Hirschman, 1994). The longer that one lives in the U.S., the more adapted, and thus the more likely one is to be a homeowner. In addition, English proficiency has been widely used as an indicator of acculturation—a principal component of the adaptation process (e.g., Alba & Logan, 1992; Krivo, 1995). Previous studies have found that immigrants with higher English proficiency are able to adapt better to the host society (e.g., Fix & Passel, 1994; Waters & Eschbach, 1995), and consequently have higher socioeconomic status and better homeownership opportunities (Alba, et al., 1999; Fang & Brown, 1999; Park, 1999; Carliner, 2000). Subtly different from English proficiency, however, homeownership attainment is an important symbol of economic success—another critical component of the adaptation process.

Housing Tenure Choice

Another important dimension to the immigration literature pertains to housing tenure choice, concerning the extent to which immigrants are different from U.S.-born households and how immigrants fare over time. There are two competing hypotheses with respect to the prospect of immigrants achieving homeownership. One set of studies shows that immigrants have lower homeownership rates than white households, even after accounting for their socioeconomic differences (Krivo, 1995; Coulson, 1999). Borjas (2002) revealed that the homeownership gap between native and immigrant households had widened substantially between 1980 and 2000. The policy concern is that immigrants may be facing unique hardships in

access to homeownership and in achieving upward mobility. The possible barriers include language difficulties, discrimination, low endowment, short credit history, and unfamiliarity with the financial institutions in the United States.

On the other hand, contemporary immigrants are more likely to stay and become permanent residents in the U.S. than their early predecessors (Alba & Nee, 2003). They also face less discrimination in the housing market. In addition, they are self-selected and have higher aspirations than their compatriots at home. Therefore, contemporary immigrants are likely to make a commitment to the host society by attaining homeownership (Myers, Megbolugbe & Lee, 1998). Bourassa (1994) studied immigrants' tenure choice in Australia revealing that, after adjusting for endowments, most immigrants have homeownership rates comparable to Australian-born residents. It is also documented that many immigrants have realized their homeownership desires through great thrift and by sacrificing the physical amenities of their purchased homes (Kirk & Kirk, 1981; Ferrie, 1999). In addition, new immigrants are less settled and more likely to live in high living cost areas than U.S.-born residents. As a result, new immigrants tend to have lower homeownership rates. Since the vast majority of immigrants came in recently, it is not surprising that immigrants have a lower homeownership rate (Painter, Gabriel & Myers, 2001). If this is the case and immigrants have adjusted homeownership rates comparable to or higher than the rates of U.S.-born residents, immigrants who have low homeownership are less worrisome; they will eventually reach or even exceed the level of U.S.-born residents as long as their socioeconomic conditions improve

with their duration of residence in the United States (Myers & Lee, 1998). While the literature is not yet conclusive on the two competing hypotheses, there is a valid concern—whether immigrants are destined to have a homeownership deficit.

While a large number of studies have investigated immigrants as a disadvantaged group, few studies have focused on well-off immigrant groups such as the Taiwanese. Clearly, there are huge differences across immigrant groups with respect to their socioeconomic status and homeownership attainment. The unique experience of Taiwanese immigrants may shed new light on this important debate.

Chinese Immigrants and Taiwanese Identity

Starting from the mid-1800s, the Chinese have intermittently migrated to the United States. However, Chinese as a race category did not show up in the U.S. census until 1870, followed by the Chinese exclusion act of 1882 (Sung, 1971). Early immigration from China peaked in the late 19th century and dwindled to a trickle in the first half of the 20th century.

The passage of the 1965 Immigration and Naturalization Act³ abolished the national origins quota system and, for the first time in U.S. history, favored

³ In the several decades prior to 1965, foreigners were only allowed to immigrate to the United States in numbers commensurate with their population size in the United States. The Immigration and Nationality Act of 1965 is one of the most important shifts of immigration policy in the United States since 1921, giving priority to family reunification, people with needed skills, and refugees. As a byproduct of the 1965 Act, Latin America and Asia have replaced Europe and become the main sources of immigration to the United States (Martin & Midgely, 2003).

immigrants who had special skills and capital. The reform also allowed Chinese to immigrate to the United States in substantial numbers. As a result, many post-1965 immigrants came with educational attainment and earning capacity higher than both their early predecessors and the average U.S.-born resident. Chinese immigrants are a good example. The first wave of Chinese immigrants, primarily from Hong Kong and Taiwan, came to the United States as students. Many of them achieved permanent residency after completing their advanced training (Zhou, 1992; Brown & Pannell, 2000). In comparison with native-born whites, a much larger share of Chinese immigrants were college graduates. Moreover, after the establishment of a formal relationship with the People's Republic of China in the late 1970s, the U.S. Congress set aside additional immigration quota specifically for people from Taiwan. The additional quota has further facilitated Taiwanese immigration to the U.S.

While ethnic Chinese immigrants share a common cultural heritage and have high homeownership rates, they have rather different causes of immigration. For example, immigration from Taiwan and Hong Kong was largely encouraged by better economic perspectives and political stability in the United States (Wachman, 1994; Tseng, 1995; Ng, 1998).⁴ In contrast, many ethnic Chinese fled Southeast Asia after the Vietnam War and after the Sino-Vietnam War. Most of them were penniless and eventually came to the United States as refugees. Among Chinese

⁴ Large immigration from Hong Kong and Macau was related to the proposed turnover to Chinese authority in the end of 1990s (Skeldon, 1994). Meanwhile, mainland China started its open-door policy since the 1980s. Chinese people for the first time since 1949 were allowed to emigrate in a large number. Many of the emigrants came to the U.S. eventually.

immigrants, the Taiwanese are of particular interest as they represent a group of economically well-off immigrants. As a sub-group of ethnic Chinese, Taiwanese immigrants have been considered as high achievers with a large proportion of professionals and executives. In contrast to other Chinese immigrants, many Taiwanese have brought wealth with them when they immigrated to the United States (Zhou, 1992; Tseng, 1995). Both wealth and occupational status have positive implications on the socioeconomic outcomes of Taiwanese immigrants in the U.S.

Unlike Chinese, a well-defined ethnic group, Taiwanese is a socially constructed and politically contested identity which has been a topic of an ongoing debate (McKeown, 1997). The Taiwanese identity is fluid, evolving, and heavily influenced by the political climate in Taiwan and the tensions between Taiwan and mainland China (Liu & Ho, 1999). Alongside the identity recognition process in Taiwan, the uniqueness of Taiwanese immigrants in the U.S. has recently attracted more attention in academic research and political debates (e.g., Chen, 1992; Ng, 1998; Rigger, 1999).

Data and Research Settings

Data

This research uses the 5 percent Public Use Microdata Sample (PUMS) from the 1990 and 1980 U.S. decennial censuses drawn from Integrated Public Use Microdata Series (IPUMS) (Ruggles & Sobek, 2003). The census data is collected once every ten years, allowing consistent and periodic check-ups. The PUMS data is

arguably the most comprehensive public data source in the United States by which tenure choice of small groups such as Taiwanese immigrants can be specifically investigated.

Geographic Areas

This analysis is applied to the Los Angeles Consolidated Metropolitan Statistical Area (CMSA), which comprises four individual Primary Metropolitan Statistical Areas (PMSA). The four PMSAs are Los Angeles–Long Beach PMSA, Anaheim–Santa Ana PMSA, Riverside–San Bernardino PMSA, and Oxnard–Ventura PMSA. The Los Angeles region has a large presence of Taiwanese and Chinese immigrants. Of all Taiwanese and Chinese immigrants in the U.S., 26 percent and 20 percent respectively lived in the Los Angeles region in 1990. Taiwanese immigrants who resided in Los Angeles were not much different from other Taiwanese living in the U.S. One exception was that those in Los Angeles had a significantly higher rate of homeownership in the 1980s. As a gateway metropolitan area, Los Angeles has also attracted a larger proportion of newly arrived Taiwanese immigrants and a large number of Taiwanese immigrants who do not speak English well.

Taiwanese immigrants⁵ are defined as those who were born in Taiwan and

⁵ The category of Chinese is officially designated by the Office of Management and Budget (OMB) for the purpose of budgeting and social programs. There is no option for Taiwanese on the census form. Sporadically, people wrote in Taiwanese as their race choice in the 1990 census. Because the number of written-in Taiwanese is very small, it is unclear whether their characteristics are representative of those who consider themselves as Taiwanese. Place of birth is therefore used to identify Taiwanese.

chose Chinese or Taiwanese as their race on the U.S. census form.⁶ Chinese immigrants are divided into four groups, which are those born in Taiwan, mainland China, Hong Kong and Macau, and other places. The sample also includes U.S.-born Chinese and Asian other than Chinese. White households are used as the reference group, because of their large sample size and stable presence. The sample includes all households that either own or rent their primary residence. The samples are further limited to those householders that are aged between 18 and 64.

Table 1 shows that the number of ethnic Chinese households as a whole grew by 150 percent in the Los Angeles metropolitan area during the 1980s, while the Taiwanese increased by more than three times. Figure 1 shows that the Los Angeles region experienced a huge influx of new Chinese immigrants in the 1980s. Meanwhile, the Los Angeles region not only received a large number of new Taiwanese immigrants but also attracted many settled ones from outside the Los Angeles region.

[Table 1 about here]

[Figure 1 about here]

Table 1 also reveals that all Chinese groups experienced net increases in

⁶ Tseng (1995) argues that, by relying on birthplace in the 1990 census, one would underestimate Taiwanese immigrants. She suggests that country of last residence is a better way to define Taiwanese immigrants. Unfortunately, the U.S. census does not provide such information. In addition, only less than 15 percent of all the residents in Taiwan were exodus from mainland China after the Second World War. The vast majority of those who were born in Taiwan are decedents of the "local people" (benshengren) who came from mainland China a couple of centuries ago (Ng, 1998). In this sense, the characteristics of immigrants who were born in Taiwan should be representative of that of the Taiwanese. Furthermore, Taiwanese identity is socially constructed and deeply rooted in socioeconomic and political evolution of the island. It is not immediately clear whether the majority of those who were born in mainland China and later immigrated to the United States would consider themselves as Taiwanese.

homeownership rates between 1980 and 1990. Taiwanese immigrants had a homeownership rate of 75 percent in 1990, 16 points higher than their rate in 1980. In contrast, the homeownership rates of white household only grew by one percentage point to 59 percent in 1990. The surge in homeownership among the Taiwanese is remarkable given the large influx of new immigrants and given the fact that new immigrants are usually low in homeownership rate. Ethnic Chinese groups other than Taiwanese immigrants also had a high level of homeownership. For instance, over 70 percent of Chinese households from mainland China owned their homes in 1990.

Model

As with the standard formulation, the observable tenure choice indicator is regressed on a vector of demographic, economic, and other factors affecting the tenure decision,

$$OWN_i = a + X_i \beta \quad (1)$$

where the binary tenure choice outcome is

$$\begin{aligned} OWN_i &= 1, \text{ if } OWN_i > 0 \text{ and} \\ OWN_i &= 0, \text{ if } OWN_i \leq 0. \end{aligned}$$

Any significant unexplained differences remaining after all other independent variables have been controlled can be attributable to preferential differences, unequal access to the housing market, or some other overlooked parameters (e.g., Wachter & Megbolugbe, 1992; Krivo, 1995).

Independent Variables

Independent variables include both household characteristics and housing market conditions. Household income⁷ instead of personal income is employed; dividend income and interest income are included as a proxy account for household wealth.⁸

In addition to the income variables, demographic factors, such as age, gender, marital status and race-ethnicity of the householder, are also included as independent variables in the tenure choice model. Age is connected with the expected mobility and prospective earnings of the household (Artle & Varaiya, 1978; Pitkin, 1990). Age is important since most homebuyers take time to accumulate enough wealth to overcome downpayment constraints. In this analysis, age of the householder is constructed in a nonlinear fashion using a set of dummy variables for selected age groups. Gender, marital status and race-ethnicity as manifestations of existing social structure are also important factors in tenure choice (Spain, 1990; Skaburskis, 1997). In addition, educational attainment is included in the tenure choice model as a proxy to indicate future earning potential (Alba & Logan, 1992; Wachter & Megbolugbe, 1992). Other household factors of importance include household size and number of workers in the household (Kendig, 1990).

The subsequent hypotheses test includes additional independent variables,

⁷ All housing prices and incomes are adjusted to 1989 dollars using the Consumer Price Index.

⁸ The proxy for wealth should be correlated with the amount of wealth in the home. Their relationship and impacts on homeownership attainment could be a topic for future research.

which are immigrant status, the duration of U.S. residence⁹, and English proficiency. While being immigrants have negative impacts on the probability of homeownership, longer duration of U.S. residence should gradually reduce the negative impacts. In addition, English proficiency has been widely used as an indicator of acculturation to the host society. Previous studies show that the inclusion of English proficiency helps explain a sizable difference in homeownership rates between native and immigrant households (Alba & Logan, 1992; Krivo, 1995). It is unclear, however, whether better English would further elevate homeownership of well-off immigrants, such as the Taiwanese.

Table 2 provides basic summary statistics for both 1980 and 1990. Each set reports variable means for the whole sample, the whites-only sample, the Chinese except for Taiwanese sample, and the Taiwanese-only sample respectively. In comparison with whites, Taiwanese immigrants have a smaller share of not-married households, a higher level of education, and higher occupational status; Chinese are much more likely to be immigrants and have lower English proficiency. While Chinese households have a lower level of household income than whites, they tend to have higher dividend and interest income. This seems to show that ethnic

⁹ As suggested by one reviewer, an alternative measure to the duration of stay in the U.S. would be the duration in the U.S. housing market. For instance, a U.S. born household head aged 30 would have a 10-year experience in the housing market. In the case of immigrant householders, it depends on the age of the household head and duration since immigration. If an immigrant household head aged 25 and came to the U.S. for 10 years, her/his years in the housing market would be 5 years. The argument is that people start to form independent households and join the housing market after age 20. The alternative setting would give immigrant household a great advantage in the parameter estimates. Since immigrants usually have much shorter duration than U.S.-born residents in the U.S. housing market, the results would show that immigrants have much stronger propensity for homeownership than U.S.-born households. While this setting may provide additional insight into immigrants' tenure decisions, it limits comparability with previous studies.

Chinese are either wealthier or more interested in saving.

Between 1980 and 1990, the mean values are largely consistent. There are a few exceptions, however. First, homeownership rates increased across the board for all the concerned groups. Second, after adjusting for inflation, the average household income of Taiwanese rose by 14.6 thousand dollars to \$52,010, which is larger than the increases experienced by either whites or other ethnic Chinese. Despite the large increase, Taiwanese still had a relatively low household income, which was \$6,470 lower than the average white household income in 1990. This is in part due to the fact that a large number of Taiwanese households have only one wage earner. Third, Taiwanese saw the largest increase in dividend and interest income. Meanwhile, many Taiwanese immigrants have maintained their business ties with Taiwan and split their time between Taiwan and the U.S. The data may have underreported household income and wealth among Taiwanese immigrants. The table also shows a list of variables that will be used in the analysis.

[Tables 2 about here]

Tenure Choice Estimations, 1980 and 1990

There are two sets of multivariate analyses. This first one looks at the relative importance of factors in the tenure choice of Taiwanese immigrants in both 1980 and 1990, examining the contributing factors to their high homeownership rates. The second one focuses on the changes between 1980 and 1990. A decomposition technique is then used to separate propensity effects from endowment effects that

led to the surge in the homeownership of Taiwanese immigrants.

Table 3 reports regression coefficients, statistical significance, and their odds ratios in 1980 and 1990 respectively. There are two sets of two models. In the logit estimation, the reference household is chosen to be white, married, aged 25-34, with a high school diploma, and a non-immigrant. Columns (A) and (C) report the results from the base model, which estimates homeownership rates in 1980 and 1990 respectively. Overall, the coefficients have the expected signs. Higher ages, being married, more educated, higher household income and wealth, and fewer workers all lead to higher homeownership rates. The likelihood of being a homeowner is higher in places where housing prices are lower and rental costs are higher.¹⁰ This result is largely consistent with previous studies. U.S.-born Chinese appeared to have the highest propensity for homeownership in 1980, while the Taiwanese were the highest in 1990. The parameter estimates of 1990 largely mirror those of the 1980s, but with a few exceptions. In comparison with whites, all ethnic Chinese had a stronger propensity for homeownership over time. However, without accounting for the fact that most ethnic Chinese are immigrants and came to the U.S. recently, the model would underestimate the propensity of the Chinese to become homeowners. For instance, in 1980, Taiwanese were not statistically different from whites in tenure choice.

¹⁰ A number of authors have focused on loan to value ratio as a measure of housing affordability (e.g., Haurin, Hendershott & Wachter, 1997; Bourassa, 2000). However, it is not immediately clear whether new immigrants follow the procedure similar to that of U.S.-born residents to get a mortgage. Given their short credit history and unsettledness, new immigrants may have a set of constraints different from those of U.S.-born residents to purchase home. The loan to value measure may not be applicable to immigrants as much as it applies to U.S.-born residents. These issues are outside the scope of this paper.

[Table 3 about here]

Column (B) and (D) in Table 3 report the results from the parsimonious model which adds immigrant status and the duration of U.S. residence to the base model as independent variables. The inclusion of the immigrant-status variables does not substantially alter the parameter estimates of the base model. Statistical results reveal that being immigrants, especially if they came in recently, lowers the probability of homeownership. Homeownership is indeed commensurate with the lengthening duration of U.S. residence. Immigrants who stayed in the U.S. for more than one decade would have a homeownership rate similar to that of native-born residents. These findings are in line with the literature.

In addition, interaction variables are created by multiplying English proficiency times the race/ethnicity dummy variable¹¹. The results shown in Table 3 indicate that speaking English well¹² would elevate homeownership probabilities in both 1980 and 1990, which were consistent with the literature. In addition, Asians other than Chinese would have significantly higher probabilities of homeownership if they spoke English well. The exception is Taiwanese immigrants, whose English proficiency was negatively associated with their homeownership attainment in 1990. In other words, everything else being equal, Taiwanese immigrants, who speak English well, have lower homeownership attainment than those who do not speak

¹¹ The coefficients of the interaction variables are the differences in the effects of these determinants on tenure choice for the concerned group versus whites. A statistically significant interaction variable indicates that the effect of this variable on tenure choice is significantly different for the concerned group than for whites.

¹² The category of speaking English well includes people who speak only English at home.

English well. This surprising result seems to indicate that many new Taiwanese immigrants achieved homeownership without substantial acculturation. Said alternatively, many Taiwanese who do not speak English well may have achieved homeownership through Taiwanese social networks and family support. Because of the high occupational status and educational attainment, Taiwanese immigrants do not have to rely on outside institutions to gain access to financial resources. With ethnic support, English proficiency may not be as important in homeownership attainment as it is to other immigrants. To a certain extent, Taiwanese immigrants have economically adapted to the U.S. well in advance of acculturation. Another way to look at it is that there may have been a significant shift in socioeconomic composition of Taiwanese immigrants. New Taiwanese immigrants are better prepared than their predecessors. Although many new comers do not speak English well, they are able to achieve a level of homeownership higher than those who speak English well.

From 1980 to 1990, there was a large increase in the coefficient of being Taiwanese. For instance, after other factors affecting tenure choice probability have been taken into account, the odds of owning a home were 3.8 times greater for Taiwanese than for white households in 1980; the odds ratio rose to 9.8 in 1990. The parameter estimates of 1990 again mirror those of 1980. In comparison with whites, other Chinese groups also saw an increase in their homeownership probabilities during the 1980s.

Based on Models (B) and (D), Figure 2 presents actual and predicted

homeownership rates of the concerned ethnic groups. The results show that white households have maintained a similar homeownership rate between 1980 and 1990. After accounting other socioeconomic factors, the estimated homeownership probabilities of white households are quite similar to the actual rates. In contrast, Chinese subgroups had predicted homeownership rates higher than both their actual rates and the rate of white households. Such difference is particularly striking for Taiwanese immigrants. Taiwanese in both years had the highest adjusted homeownership rate, while the increase in adjusted rates was much smaller than the increase in the actual homeownership rates. Ageing, rising household income, and the arrivals of well-off new immigrants may explain a large part of the net increase in Taiwanese homeownership rate.

[Figure 2 about here]

Table 4 reports the logit estimates of the Chinese immigrants-only sample in both 1980 and 1990. The reference group here is changed to mainland Chinese with the same household characteristics as the reference household in the previous estimates. Since the number of observations in the Chinese immigrants-only sample is rather small, many parameter estimates are no longer statistically significant. Taiwanese still have the highest adjusted homeownership rate among the Chinese. Model (F) shows that, relative to mainland Chinese, Taiwanese had a higher homeownership probability in 1990. Overall, these results appear to indicate that ethnic Chinese immigrants are more sensitive to wealth and to local housing prices

than the full sample. The results from the Chinese immigrants-only sample are largely consistent with those of the full sample, showing the estimates are robust.

[Table 4 about here]

Quantifying the Changes from 1980 to 1990

Thus far, it has been observed that homeownership rates increased in most ethnic Chinese from 1980 to 1990. Taiwanese immigrants had both the highest predicted homeownership and the largest increase in predicted homeownership in the 1980s. However, it is unclear whether the phenomenal rise in Taiwanese homeownership was due to changes in endowment or due to the new arrivals. It is also inconclusive regarding the degree to which Taiwanese immigrants were different from other Chinese immigrants in achieving homeownership.

This section use an indirect measure is to quantify the trends in homeownership attainment. The procedure used in Yates (2000; 2002) and Bostic & Surette (2001) is a variant of the decomposition technique originally developed by Oaxaca (1973) and Blinder (1973) for the study of discriminations and inequality in the labor market. The procedure first calculates fitted homeownership rates for each type of household in the year 1980 and 1990,

$$\begin{aligned} OWN_{80}^* &= a_{80} + X_{80}\beta_{80} \\ OWN_{90}^* &= a_{90} + X_{90}\beta_{90} \end{aligned} \tag{2}$$

where the binary tenure choice outcome is

$$\begin{aligned} OWN_i &= 1, \text{ if } OWN_i^* > 0 \text{ and} \\ OWN_i &= 0, \text{ if } OWN_i^* \leq 0. \end{aligned}$$

Then I use probit estimates of the parameters in equation (2) to quantify the average homeownership probability of each Chinese subgroup and to compute the changes between 1980 and 1990. The total predicted change is,

$$\Delta OWN_{total} = \Phi(\hat{\beta}_{90}X_{90}) - \Phi(\hat{\beta}_{80}X_{80}) \quad (2a)$$

where Φ is the cumulative normal distribution function, and $\hat{\beta}$ represents the vector of the estimated probit parameters. Column 1 of Table 5 reports how the predicted homeownership rates of each group of households changed between 1980 and 1990. Household income, housing price, and rental cost are held constant at the 1989 level, so that the changes in predicted homeownership rates, reported in equation (2a), can be separated into two parts: (1) changes due to all variables in X (changes in household economic and demographic characteristics) or endowment effects¹³ and (2) changes due to residual factors or propensity effects. Changes in homeownership associated with changes in the entire X vector can be simultaneously calculated as

$$\Delta OWN_E = \Phi(\hat{\beta}_{80}X_{90}) - \Phi(\hat{\beta}_{80}X_{80}) \quad (2b)$$

Equation (2b) captures the changes in homeownership propensity assuming that the 1980 coefficients remained constant, but allowing the demographic

¹³ Endowment effects refer to the changes that can be captured by statistic models, while propensity effects can not.

distribution of the sample to change as it in fact did between 1980 and 1990. The results are reported in column 2 of Table 5. I can calculate changes in homeownership attributable to changes in all other factors as

$$\Delta OWN_R = \Phi(\hat{\beta}_{90}X_{90}) - \Phi(\hat{\beta}_{80}X_{90}) \quad (2c)$$

Equation (2c)¹⁴ reports the changes in predicted homeownership rates if the model changes, but household characteristics remain the same as they were in 1990. The residual difference may be due to non-measured factors, which are external to the household. Since the new arrivals of Taiwanese and ethnic Chinese immigrants in the 1980s are likely to be the main explanation for their rapid rise in predicted homeownership, the residual difference may capture the impact of these new arrivals. The results are reported in column 3 of Table 5.

Following Bourassa (1994) and Wachter and Megbolugbe (1992), a chi-square test is used to examine the significance of the residential difference and to test the null hypothesis that both $a_{80} = a_{90}$ and $\beta_{80} = \beta_{90}$. The test attempts to check whether the 1980 and the 1990 estimates are statistically different from each other. This test requires estimating each of the tenure choice models in Table 5. The first step is to pool the 1980 and 1990 data together into one dataset. Then, the test is conducted by using the statistic $X_1 = -2(P - U)$, where P is the log-likelihood for the pooled estimation and U is the sum of the log-likelihoods for the separate 1980 and 1990 estimations. This statistic is distributed chi-square with $k+1$ degrees of freedom,

¹⁴ The sum of the quantities in equations (2b) and (2c) equals the total change given in equation (2a).

where k denotes the number of explanatory variables, excluding the constant term. Rejection of the null hypothesis would provide sufficient evidence of a change in homeownership propensities between the two years. Application of the test indicated the legitimacy of the procedure and showed that the residual effect in all the following sections is indeed significant.¹⁵

Model Estimates

The results of the full model are reported in Section (I) of Table 5, which shows that the predicted homeownership rate increased from 1980 to 1990 for all Chinese groups. Such increase is more pronounced in Taiwanese immigrants which had a 9.6 percentage point gain. Meanwhile, the large increases in predicted homeownership among ethnic Chinese are largely due to the changes in endowment, such as ageing and rising income and wealth. More specifically, had the Taiwanese behaved the same as they did in 1980, they would have seen a 5.9 point increase in homeownership rate. As shown in column 3, all residual effects are negative, except for the Taiwanese. For the Taiwanese, there was a 3.6 point increase in homeownership rate is due to factors other than changing endowment. The numbers reported in column 3 are of particular interest as they represent the residuals that can not be captured by the changes in endowment.

The aggregate decomposition shown in Section (I) may not reveal all the details. Therefore, separate sets of estimation are used to underscore the differences

¹⁵ Detailed results are available from the author.

that exist with respect to one outcome, namely homeownership propensity, and explain the extent to which different groups have contributed to the 3.65 percentage point increase in predicted Taiwanese homeownership during the 1980s. In the following section, households are separately grouped by age, immigrant status, education, household income, and wealth (interest and dividend income). The results are reached by comparing the residual effects in each section. The estimation results of Taiwanese immigrants are highlighted in black squares.

Sections (II) and (III) report for new immigrants and settled immigrants respectively and test whether new or settled immigrants were more attributable to the rapid rise in homeownership. New Taiwanese immigrants contributed 6.6 percentage points more than settled immigrants, indicating that recent Taiwanese immigrants are more accountable for the large increase in Taiwanese homeownership propensity. In the current methodology, this is represented by the fraction that can not be explained by changes in household-related characteristics being larger for new immigrants. This pattern is similar to that observed in immigrants from Hong Kong and Macau, while new immigrants from mainland China dragged down the overall homeownership rate of mainland Chinese immigrants.

Another notable finding is that the gaps in predicted homeownership between Taiwanese immigrants and other Chinese groups are more pronounced among new immigrants than among settled ones. The finding supports the notion of a significant compositional shift in new Taiwanese immigrants. In contrast to

their predecessors, many newly arrived Taiwanese immigrants are able to purchase homes quickly after arrival.

Alternatively, Models (IV) and (V) divide the full sample into two parts by age, and respectively estimate householders age 34 and younger, and age 35 and older. Younger Taiwanese households contributed 6.8 points more to the residual increase in homeownership rate. In contrast, older U.S.-born Chinese and mainland Chinese have shown a large increase.

Sections (VI) and (VII) divide the full sample into two groups, depending on whether the householders have at least a college degree. College trained Taiwanese had a gain in homeownership probability 6.8 points higher than those who were not college trained. Said alternatively, highly educated Taiwanese led to the rapid growth in Taiwanese homeownership propensity. In contrast, less educated U.S.-born Chinese and ethnic Chinese from Hong Kong and Macau were responsible for the decrease in their homeownership propensities.

Sections (VIII) and (IV) split the full sample into two groups: those whose household income is higher than the median level and those whose household income is lower than the median level. Section VIII reports that low-income Taiwanese households were more responsible for the large growth in homeownership propensity, so were immigrants from mainland China. The result is in contrast to high-income Chinese from Hong Kong, Macau, the U.S. and other places. It is possible that newly arrived Taiwanese do not have a high level of

income in the U.S. because a large number of them have only one wage earner. In addition, many new Taiwanese immigrants have maintained business ties in Taiwan and split their time between the two places (Tseng, 1995; Ng, 1998). The data may not fully capture their income and wealth.

Sections (V) and (VI) again separate the full sample into two groups, depending on whether household wealth (dividend and interest income) is higher than the median level. Section (VI) shows that wealthy Taiwanese immigrants are more attributable to the rise in Taiwanese homeownership propensity. Since the Taiwanese had a lower level of household income, many new Taiwanese immigrants may have achieved homeownership by relying on their wealth, family support, and ethnic network to overcome financial constraints in the U.S. housing market. The results also indicate that Taiwanese are quite distinctive from other Chinese groups in the way they achieved a higher homeownership in the 1980s, although all ethnic Chinese seem to have a strong affinity for homeownership.

[Table 5 about here]

Conclusions

This study investigated the tenure choice of the Taiwanese, a group of well-off immigrants in the Los Angeles region during the 1980s. Empirical evidence presented here suggests that Taiwanese immigrants have attained homeownership in a unique fashion, as they have homeownership rates not only higher than other Chinese immigrants but also significantly higher than white households. After

taking socioeconomic differences into consideration, the gaps in predicted homeownership rates become even larger than the actual gaps. Unexpectedly, such sizable differences were more pronounced in 1990, a time in history which saw a huge influx of new Taiwanese immigrants. More surprisingly, English proficiency as an indicator of acculturation was negatively associated with Taiwanese homeownership attainment. Many Taiwanese seem to have reached the same level of homeownership as U.S.-born residents in the absence of acculturation. It also indicates a possible compositional shift in recent Taiwanese immigrants. That is, many more well-off Taiwanese may have come to the U.S. recently. Instead of climbing up the ladder of homeownership attainment gradually as did most other immigrant groups, many new Taiwanese immigrants have purchased their homes soon after their arrival.

These findings are in line with the literature (Waldinger & Tseng, 1992; Tseng, 1995). It was documented that many Taiwanese immigrants have educated themselves about the U.S. housing market before departure, which may have contributed to their well-preparedness and subsequent home purchase soon after they arrived in the U.S.

While changing endowment helps explain a large part of the large increase in Taiwanese homeownership, a significant portion of the increase is due to other factors. Taiwanese households, who contributed to the residual increases in homeownership propensity, are more likely to be new, young, and highly educated Taiwanese immigrants with a low level of income but a high level of household

wealth. While it is not fully conclusive whether this residual increase in homeownership propensity is due to changing taste or due to factors that are not accounted for, the path by which Taiwanese achieve homeownership refutes the hypothesis that all immigrants are destined to homeownership deficits. The arrival of well-off immigrants such as the Taiwanese is likely to disproportionately increase the demand for owner-occupied housing and make a significant impact on the regional housing market.

In comparison with white and other Asian households, Chinese of different birthplaces have a similar high propensity for homeownership. While a common cultural heritage may provide a plausible explanation for this phenomenon, distinctive life histories and unique paths of immigration seem to be a more salient explanation for the differential propensities for homeownership across ethnic Chinese groups.

An aggregate effect of policy shifts in both Taiwan and the United States, economic prosperity of the island and political tensions across the Taiwan Strait have triggered a large exodus of well-off Taiwanese to the Los Angeles region, which may have in turn contributed to the surge in homeownership during the 1980s. Another possible explanation for the high homeownership rates of Taiwanese immigrants is that they may have wealth or resources connected to their home countries, which cannot be fully captured by the available dataset. Informal resources such as ethnic network, family support, and peer influences may also be

instrumental to Taiwanese homeownership attainment as indicated in the literature (Painter, Yang & Yu, 2004).

Even though Taiwanese immigrants have a high level of homeownership attainment, it does not necessarily suggest that they are socially and culturally well assimilated into their host society. On the contrary, the Taiwanese who are economically advanced may have less need to communicate with other ethnic groups. As a result, they may be less acculturated and more socially isolated from the host society than less well-off immigrants. In other words, economic incorporation may not automatically lead to social adaptation. Additional research on the relationship between social adaptation and economic integration is certainly necessary.

A topic not discussed in this research is whether Taiwanese immigrants in the Los Angeles region are representative of all Taiwanese immigrants in the U.S. Although one in four Taiwanese immigrants in the U.S. live in the Los Angeles region, those who choose to reside in immigrant gateway metropolitan areas could be systematically different from those who live outside the area.

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Table 1. Number of households and homeownership rates by place of birth, Los Angeles CMSA, 1980 and 1990

	<u>Number of households</u>			<u>Owner (%)</u>		
	1980	1990	% Growth	1980	1990	Changes
White, non-Hispanic	2,178,600	2,318,386	6.4	58.1	59.4	1.3
Asian	154,320	338,332	119.2	52.8	55.6	2.8
All Chinese	32,080	80,203	150.0	61.4	66.6	5.2
Chinese born in						
Taiwan	4,440	21,200	377.5	58.6	75.0	16.5
Mainland China	13,940	24,149	73.2	68.7	70.7	1.9
Hong Kong and Macau	2,800	7,712	175.4	55.0	63.7	8.7
The U.S.	6,300	9,947	57.9	61.0	67.4	6.5
Other places	4,600	17,195	273.8	46.5	51.4	4.9

Note: The number of households represents householders aged between 18 and 64. Chinese immigrants from other places refer to foreign-born Chinese who were born in places other than Taiwan, mainland China, Hong Kong, and Macau.

Source: 5% Public Use Microdata Samples of the US Census, 1980 and 1990

Table 2. Variable Summary Statistics, Los Angeles CMSA, 1980 and 1990

Variable	1980				1990			
	All*	White	Chinese excluding Taiwanese	Taiwanese**	All*	White	Chinese excluding Taiwanese	Taiwanese**
Ownership Rate	0.578	0.581	0.620	0.586	0.610	0.614	0.648	0.768
Age 18-24	0.089	0.090	0.076	0.095	0.047	0.047	0.037	0.054
Age 25-34	0.278	0.276	0.322	0.446	0.261	0.261	0.262	0.277
Age 35-44	0.224	0.220	0.257	0.306	0.290	0.285	0.329	0.412
Age 45-54	0.203	0.203	0.210	0.113	0.219	0.217	0.217	0.193
Age 55-64	0.206	0.211	0.135	0.041	0.183	0.190	0.154	0.064
Not Married, Male Head of Household	0.200	0.202	0.181	0.176	0.199	0.206	0.158	0.142
Not Married, Female Head	0.226	0.229	0.152	0.180	0.224	0.231	0.164	0.186
No High School Diploma	0.132	0.133	0.171	0.063	0.065	0.061	0.158	0.048
High School Dip. W/ College	0.579	0.589	0.335	0.306	0.570	0.588	0.376	0.345
College Degree or Better	0.289	0.279	0.495	0.631	0.365	0.351	0.466	0.607
Number of People in Household	2.673	2.631	3.261	3.414	2.772	2.656	3.589	3.397
Number of Workers in Household	1.253	1.246	1.359	1.177	1.386	1.369	1.494	1.277
Total Household Income (in \$1,000)	46.16	46.32	44.73	37.41	57.62	58.47	51.95	52.01
Dividend and Interest Income (in \$1,000)	1.903	1.934	2.122	2.486	2.210	2.303	2.326	3.128
The 25th Percentile Housing Price (Log)	11.78	11.78	11.78	11.78	12.03	12.03	12.06	12.13
Area Median Rent (Log)	6.261	6.263	6.228	6.251	6.539	6.542	6.494	6.573
Chinese	0.014	-	1	1	0.031	-	1	1
Chinese - Taiwan	0.002	-	-	1	0.008	-	-	1
Chinese - Mainland China	0.006	-	0.506	-	0.010	-	0.420	-
Chinese - Hong Kong and Macau	0.001	-	0.102	-	0.003	-	0.128	-
Chinese - the U.S.	0.003	-	0.243	-	0.004	-	0.177	-
Chinese - Other places	0.002	-	0.163	-	0.007	-	0.285	-
White	0.937	1	-	-	0.874	1	-	-
Speaking English Well or the Only Language at Home	0.985	0.994	0.821	0.806	0.970	0.991	0.763	0.798
Speak English Not Well or Not at All	0.015	0.006	0.179	0.194	0.030	0.009	0.237	0.202
Immigrant	0.122	0.085	0.757	1	0.187	0.095	0.823	1
Came To U.S. In The Past 5 Yrs.	0.032	0.015	0.219	0.527	0.034	0.015	0.145	0.250
Came To U.S 5-10 Years Ago	0.018	0.007	0.165	0.315	0.043	0.014	0.227	0.371
Came To U.S 10-15 Years Ago	0.015	0.010	0.140	0.144	0.037	0.016	0.180	0.228
Came To U.S 15-20 Years Ago	0.016	0.014	0.075	0.009	0.020	0.008	0.099	0.088
Came To U.S 20-30 Years Ago	0.027	0.025	0.080	0.005	0.030	0.021	0.125	0.050
Came To U.S More Than 30 Years Ago	0.015	0.015	0.078	0.000	0.023	0.022	0.047	0.007
Number of Observations	116,386	109,038	1,378	222	127,139	111,088	2,912	1,047

Note: All dollar figures are in 1989 dollars.

* The full sample includes non-Hispanic whites and Asian.

**Taiwanese refer to those who were born in Taiwan and chose Chinese or Taiwanese on the U.S. Census form.

Table 3. Logit Estimates: Chinese Groups Pooled with Other Asians and non-Hispanic Whites, Los Angeles CMSA, 1980 and 1990

Variable	(A)		(B)		(C)		(D)	
	1980				1990			
	Coef.	Odds Ratio	Coef.	Odds Ratio	Coef.	Odds Ratio	Coef.	Odds Ratio
Intercept	6.742 ***		6.171 ***		2.278 ***		1.666 ***	
Age 18-24	-1.176 ***	0.309	-1.186 ***	0.306	-0.975 ***	0.377	-0.980 ***	0.375
Omitted: Age 25-34								
Age 35-44	0.733 ***	2.081	0.719 ***	2.052	0.698 ***	2.010	0.687 ***	1.989
Age 45-54	1.094 ***	2.987	1.074 ***	2.926	1.239 ***	3.451	1.222 ***	3.394
Age 55-64	1.394 ***	4.032	1.363 ***	3.907	1.693 ***	5.433	1.655 ***	5.232
Not Married, Male Head Of Household	-1.291 ***	0.275	-1.297 ***	0.273	-1.057 ***	0.348	-1.073 ***	0.342
Not Married, Female Head Of Household	-0.929 ***	0.395	-0.963 ***	0.382	-0.800 ***	0.449	-0.851 ***	0.427
Omitted: Married								
No High School Diploma	-0.429 ***	0.651	-0.404 ***	0.668	-0.548 ***	0.578	-0.465 ***	0.628
Omitted: High School Dip. W/ College Degree Or Better								
Number of People in Household	0.181 ***	1.199	0.206 ***	1.229	0.022 ***	1.022	0.047 ***	1.048
Number of Workers in Household	-0.234 ***	0.792	-0.250 ***	0.779	-0.193 ***	0.824	-0.225 ***	0.798
Total Household Income (in \$1,000)	0.028 ***	1.028	0.027 ***	1.027	0.024 ***	1.025	0.023 ***	1.024
Dividend and Interest Income (in \$1,000)	0.014 ***	1.014	0.014 ***	1.014	0.038 ***	1.039	0.036 ***	1.037
The 25th Percentile Housing Price (Log)	-2.169 ***	0.114	-2.072 ***	0.126	-1.478 ***	0.228	-1.417 ***	0.242
Area Median Rent (Log)	2.824 ***	16.84	2.682 ***	14.611	2.231 ***	9.313	2.168 ***	8.743
Chinese Born in								
Taiwan	0.307	1.360	1.342 **	3.826	1.194 ***	3.30	2.282 ***	9.801
Mainland China	0.268 **	1.307	0.681 **	1.975	0.441 ***	1.554	0.872 ***	2.392
Hong Kong and Macau	0.445 *	1.560	-0.452	0.636	0.765 ***	2.150	0.664	1.943
the U.S.	0.618 ***	1.856	0.589 ***	1.803	0.817 ***	2.264	0.796 ***	2.218
Other places	-0.485 **	0.616	-0.100	0.904	0.062	1.064	-0.217	0.805
Asian except Chinese	-0.445 ***	0.641	-0.279 *	0.756	-0.238 ***	0.788	-0.352 ***	0.703
Omitted: non-Hispanic White								
Immigrant	-	-	-1.407 ***	0.245	-	-	-1.467 ***	0.231
Omitted: Non-Immigrant								
Came To U.S 5-10 Years Ago	-	-	1.043 ***	2.838	-	-	0.993 ***	2.698
Came To U.S 10-15 Years Ago	-	-	1.436 ***	4.205	-	-	1.600 ***	4.952
Came To U.S 15-20 Years Ago	-	-	1.610 ***	5.001	-	-	1.696 ***	5.451
Came To U.S 20-30 Years Ago	-	-	1.639 ***	5.151	-	-	1.828 ***	6.224
Came To U.S More Than 30 Years Ago	-	-	1.601 ***	4.957	-	-	1.869 ***	6.483
Omitted: Came To U.S. In The Past 5 Yrs.								
Speaking English Well or the Only Language at Home	-	-	0.346 **	1.413	-	-	0.351 ***	1.420
Interaction-Taiwan	-	-	-0.123	0.884	-	-	-0.537 *	0.585
Interaction-Mainland China	-	-	0.107	1.113	-	-	0.035	1.036
Interaction-Hong Kong and Macau	-	-	1.325	3.762	-	-	0.326	1.385
Interaction-Other places	-	-	0.465	1.593	-	-	0.988 ***	2.685
Interaction-Asian other than Chinese	-	-	0.337 *	1.401	-	-	0.462 ***	1.587
Number of Observations		116,386				127,139		
χ^2	45,838		46,968		43,919		45,862	
df	20		32		20		32	
Pseudo R2	0.289		0.296		0.258		0.270	
Log Likelihood	-56,341		-55,776		-63,075		-62,103	

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 5. Homeownership-trend decompositions, 1980-1990

	(1)	(2)	(3)
	Estimated Total Change (% points)	Endowments (% points)	Due to change in residual (% points)
(I). Full Sample:			
Chinese born in			
Taiwan	9.56	5.90	3.65
Mainland China	4.55	7.06	- 2.52
Hong Kong and Macau	5.32	6.73	- 1.41
U.S.	5.96	7.32	- 1.35
Other places	5.45	7.94	- 2.50
(II). Recent immigrants -- excluding immigrants who arrived more than 10 years ago:			
Chinese born in			
Taiwan	12.0	5.60	6.43
Mainland China	2.31	6.62	- 4.31
Hong Kong and Macau	6.94	5.96	0.98
U.S.	5.52	7.06	- 1.54
Other places	3.68	7.55	- 3.86
(III). Settled immigrants -- excluding immigrants who arrived in the last 10 years:			
Chinese born in			
Taiwan	6.77	7.00	- 0.22
Mainland China	7.34	7.61	- 0.27
Hong Kong and Macau	6.67	7.60	- 0.93
U.S.	6.94	7.64	- 0.70
Other places	10.6	8.59	2.01
(IV). Younger households -- excluding householders older than 34:			
Chinese born in			
Taiwan	17.6	8.63	8.97
Mainland China	4.56	8.76	- 4.19
Hong Kong and Macau	10.4	9.48	0.90
U.S.	4.10	9.32	- 5.22
Other places	5.37	9.39	- 4.02
(V). Older households -- excluding householders younger than 35:			
Chinese born in			
Taiwan	3.73	1.55	2.19
Mainland China	3.69	2.62	1.07
Hong Kong and Macau	0.32	2.21	- 1.89
U.S.	6.92	2.93	3.99
Other places	3.45	3.78	- 0.34
(VI). Less educated -- excluding householders who do not have college degree:			
Chinese born in			
Taiwan	1.66	3.70	- 2.04
Mainland China	4.38	5.41	- 1.03
Hong Kong and Macau	- 3.62	4.96	- 8.57
U.S.	- 3.39	5.23	- 8.62
Other places	6.41	5.81	0.60

(VII). More educated -- excluding householders who have college degree or better:

Chinese born in			
Taiwan	11.05	6.27	4.78
Mainland China	2.71	6.49	- 3.78
Hong Kong and Macau	6.25	6.69	- 0.44
U.S.	6.41	7.36	- 0.95
Other places	6.36	7.46	- 1.11

(VIII). Low income -- excluding household with income above the median level:

Chinese born in			
Taiwan	14.9	9.71	5.14
Mainland China	11.7	11.4	0.33
Hong Kong and Macau	5.27	10.8	- 5.50
U.S.	5.88	10.9	- 5.05
Other places	4.09	11.7	- 7.63

(IV). High income --excluding household with income below the median level:

Chinese born in			
Taiwan	1.23	1.61	- 0.37
Mainland China	0.23	2.03	- 1.80
Hong Kong and Macau	6.26	2.41	3.85
U.S.	5.74	3.07	2.67
Other places	8.86	3.26	5.59

(V). Less wealthy -- excluding household with dividend income above the median level:

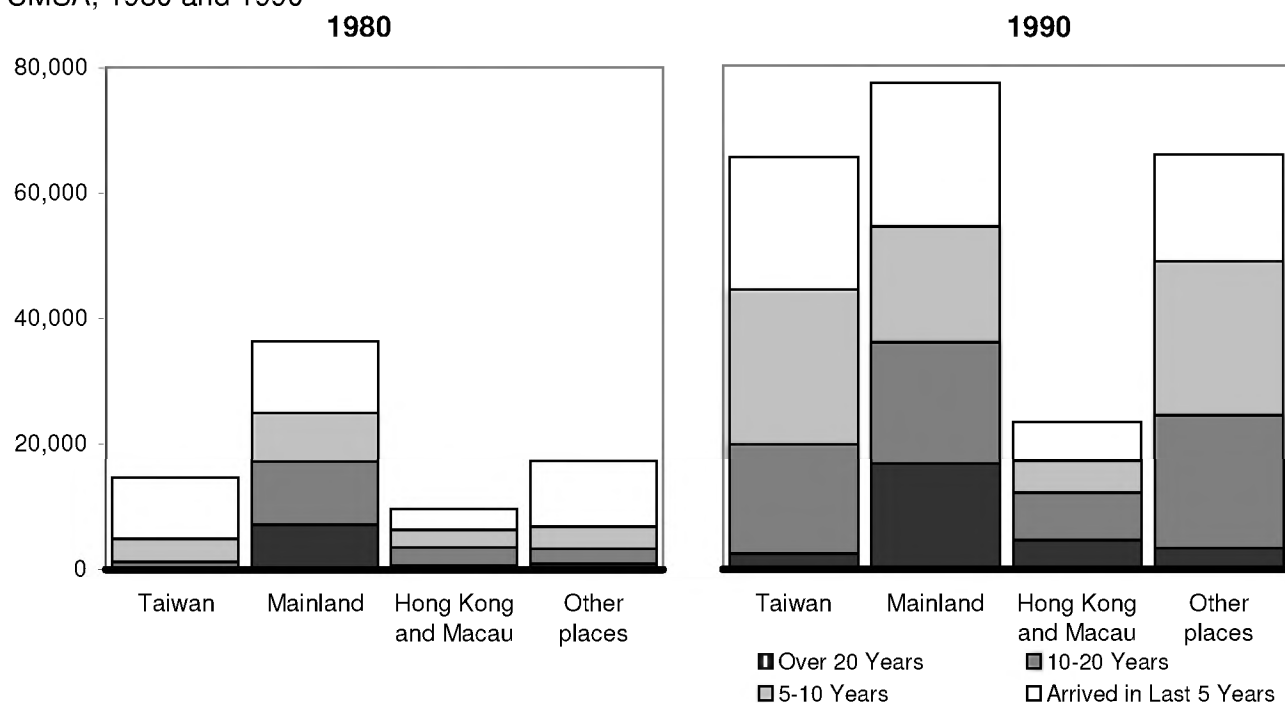
Chinese born in			
Taiwan	9.96	7.41	2.56
Mainland China	6.67	9.40	- 2.73
Hong Kong and Macau	6.00	8.92	- 2.92
U.S.	14.60	9.74	4.86
Other places	4.56	10.0	- 5.45

(VI). More wealthy -- excluding household with dividend income below the median level:

Chinese born in			
Taiwan	10.2	4.20	5.97
Mainland China	1.86	4.18	- 2.33
Hong Kong and Macau	4.25	3.86	0.39
U.S.	0.94	4.17	- 3.23
Other places	7.94	5.04	2.91

Note: The tenure choice model is described in columns (B) and (E) of table 3 for 1980 and 1990 respectively.

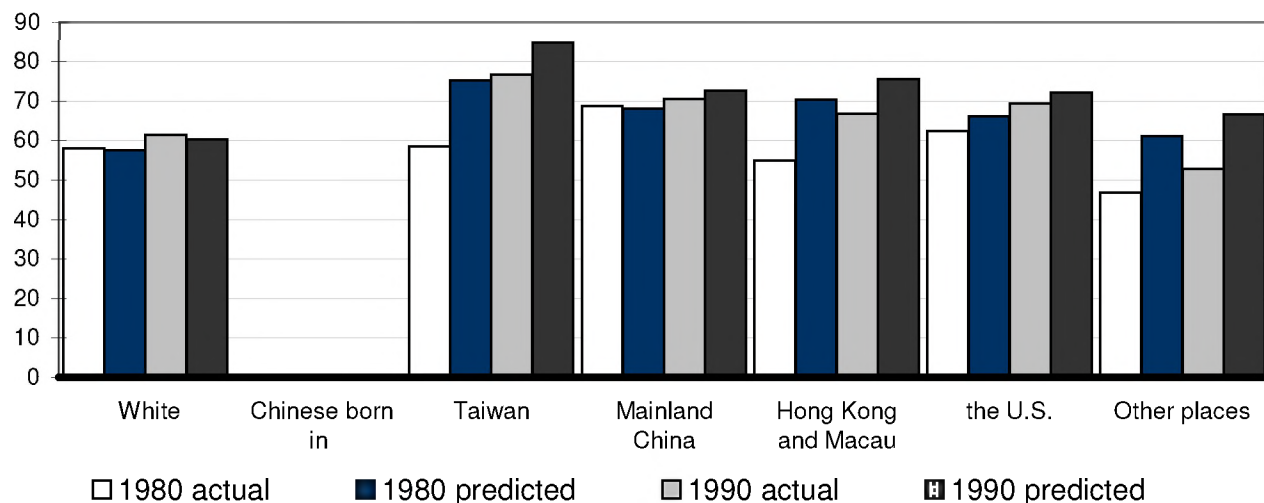
Figure 1. Foreign Born Chinese Population by Immigrant Status and Birthplace, Los Angeles CMSA, 1980 and 1990



Note: Population refers to the total number of people who are not in group quarters. Chinese immigrants from other places refer to foreign-born Chinese who were not born in Taiwan, mainland China, Hong Kong, or Macau.

Source: 5% Public Use Microdata Sample of the US Census, 1980 and 1990.

Figure 2. Actual and Predicted Homeownership Rates for Each Chinese Group, Los Angeles CMSA, 1980 and 1990*



Note: The predicted homeownership for each birthplace variable is computed from the estimation of the whole sample in the two years after controlling for socioeconomic factors. The full equations are reported in columns (B) and (D) of table 3.